



SRS Citizens Advisory Board

Nuclear Materials Committee

Meeting Summary

April 22, 2002
Desoto Hilton
Savannah, GA

The Citizens Advisory Board (CAB) Nuclear Materials (NM) Committee met on Monday, April 22, 7:00 p.m. at the Desoto Hilton, Savannah, GA. The following topics were discussed: Storage of Depleted Uranium, H-Canyon Tank Space Management, Prioritization of NM Work Plan, Designation of NM Vice Chair, and Public Comment. Attendance was as follows:

CAB Members

Ken Goad*
Wade Waters*
William Lawrence*
Murray Riley
Bill Vogele

Stakeholders

None

Regulators

Craig Marriner, SCDHEC
Keith Collinsworth, SCDHEC

DOE/Contractors

Gerri Flemming, DOE
Howard Gnann, DOE
Phil Breidenbach, WSRC
Teresa Haas, WSRC
Ron Oprea, WSRC
Lyddie Broussard, WSRC

* NM Members present

Note: Jean Sulc is a CAB member of the NM Committee, but was unable to attend this session.

Welcome and Introduction

Wade Waters, CAB Chair, welcomed the group and explained that he would chair the meeting until Ken Goad arrived. As a follow-up on the last committee meeting, he stated that the status of F-Canyon is still of great concern to this committee and to the CAB. He said it has been confirmed that F-Canyon Suspension Plans will be the topic of the next NM meeting scheduled for Monday, May 20, 6:00 PM at the North Augusta Community Center, North Augusta, SC. He then reviewed the evening's agenda and introduced the first speaker.

Depleted Uranium Oxide Disposition

Phil Breidenbach opened his presentation with an explanation of Depleted Uranium Oxide (DUO). He stated that it was a by-product from the chemical separations process and has been safely stored on site for many years without incident. While it is a radioactive material, DUO represents a very low radiological concern for the worker and represents a negligible threat to the public at the site boundary. He further stated in addition to radiological hazards, all DUO hazards, including toxicological and industrial, are well understood and represent a low risk. At the current time there are over 36,000 55-gallon drums of DUO stored in F, N, and R Areas that were accumulated from the separations processes of the 1950s through the 1980s.

Breidenbach explained that these drums are stored in several metal buildings but some of the drums have shown evidence of corrosion due to water intrusion. He stated that a recent corrosion study has determined that only those drums exposed to standing water were of most concern. The drums only exposed to atmospheric conditions showed superficial corrosion levels and required no remediation.

Since 1998, improvements have been made which include overpacking the drums with the greatest level of corrosion as well as building repairs to ensure the storage facilities are adequately maintained. In addition, an ongoing inspection program ensures the storage facilities are routinely monitored to ensure any new developments would be quickly addressed.

Numerous questions were asked and answered during this presentation about the manner in which overpacking is done, commercial options for the DUO, and challenges to shipping these drums.

In an effort to eliminate the risks associated with DUO, Breidenbach stated several options are under consideration. While overpacking some of the remaining drums is still an option, efforts are underway to determine a final disposition of the drums. The decision will be based on the best, most cost effective final disposition path. Within the next few weeks, results from Envirocare of Utah and the Nevada Test Site will show whether or not the DUO will meet their waste acceptance criteria. Another option is to consider direct disposal with grout in high level waste tanks or disposal with cement into saltstone vaults at SRS. If any of these prove to be an acceptable alternative, consideration will be given to a permanent disposition of this material rather than continuing to maintain it.

H-Canyon Tank Space Management

Ron Oprea thanked the committee for the opportunity to discuss the status of the H-Canyon storage capacity for highly enriched uranium (HEU) solution. He stated that H-Canyon is facing a challenge but is successfully managing tank space in order to support the blend down of highly enriched uranium that will be used as fuel in a Tennessee Valley Authority (TVA) commercial power reactor.

As background, Oprea explained that the uranium solutions had been accumulated over the last several years as part of H-Canyon's mission to stabilize nuclear materials. The uranium solutions resulted from the processing of spent fuel rods from SRS reactors and some offsite reactors. Through successful negotiations with TVA, it was determined that these solutions would be a viable source material for commercial fuel fabrication when mixed with natural uranium. As a result, capital improvements are underway to prepare for this mission.

Tank availability will be limited until shipments to TVA's fuel fabrication facility can begin and the tank space is being managed carefully. Under the current schedule, the H-Canyon HEU solution available tank space will be full in late August 2002. At that time, an intense pre-operational assessment will begin to confirm all aspects of the capital improvements (including people, plant, and paper) are ready before beginning the final steps of processing the uranium solutions per TVA specifications and storing for subsequent blending with natural uranium and shipment. It is projected that H-Canyon will be declared ready to proceed with the final processing to ensure the uranium solution meets all of TVA's specifications by November 2002. There are 295 shipments planned during a 55-month shipping campaign scheduled to begin in late March 2003.

NM committee members quizzed Oprea on the investment of TVA and process related questions. Oprea stated that this project represents a win-win for SRS and TVA and provides a pathway for the uranium solutions out of SRS.

Prioritization of NM Committee Work Plan & Designation of Vice Chair

Ken Goad opened discussion on the approved NM Committee Work Plan. A discussion was held and it was agreed that a status update on the NM programs would be appropriate in the coming months. F-Canyon suspension plans have been established as the number one priority and will be the topic of the May 20 meeting. It was also agreed that in lieu of the recent statements from the South Carolina Governor's office, a presentation on the status of Plutonium Shipments to SRS would be requested. This presentation is proposed for the Nuclear Materials section of the Combined Committees Meeting scheduled for Tuesday, May 21, 8:30 a.m. at the North Augusta Community Center, North Augusta, SC.

Ken Goad advised the committee that a Vice Chair was needed in the event of his absence. William Lawrence accepted the appointment to the position of Vice Chair of the Nuclear Materials Committee.

Public Comment

Requests for public comment were made and upon no comment, the meeting was adjourned.

Meeting handouts may be obtained by calling 1-800-249-8155.